

ABSTRACT

The intrinsic base region of a bipolar transistor is formed to avoid a chemical interaction between the chemicals used in a chemical
5 mechanical polishing step and the materials used to form the base region. The method includes the step of forming a trench in a layer of epitaxial material. After this, a base material that includes silicon and germanium is blanket deposited, followed by the blanket deposition of a layer of protective material. The layer of protective material protects
10 the base material from the chemical mechanical polishing step.